

A new CZ method for Ge crystals free from dislocations

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Recently, Ge has been revisited for applications in ultra-fast Ge-MOSFET devices and solar energy converters for its favorable basic properties of intrinsic carrier mobility and lattice matching. For the realization of such applications, high quality Ge crystals are needed. We developed a new CZ method for growing such high quality Ge crystals from a melt covered with liquid B_2O_3 . The dislocation density of the crystal in the photograph was almost zero.

